

Date: Sun, 21 Aug 94 23:00:54 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #943  
To: Info-Hams

Info-Hams Digest                      Sun, 21 Aug 94                      Volume 94 : Issue    943

Today's Topics:

                    Canadian or Mexican Scanner Laws?  
        Daily Summary of Solar Geophysical Activity for 20 August  
                FCC license renewal processing time data point  
                IPS Daily Report - 21 August 94  
                        learning CW  
                Mobile Radio Theft Insurance?  
                        Mods for Standard C228A?  
                        Radio Interface to Internet?  
    rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)  
                        Shuttle Freqs  
                TEK 486 300Mhz Oscilloscope Sale/Swap  
                        Whence QST?  
                        Which group for BBC?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
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Date: 22 Aug 1994 03:38:35 GMT  
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!g9153402@network.ucsd.edu  
Subject: Canadian or Mexican Scanner Laws?  
To: info-hams@ucsd.edu

Does anyone know of the laws in Canada or Mexico about stores being  
able to sell radio scanners that are modifiable to scan the cellular  
spectrum? I'm curious here. Is it as tough as the U.S. law, which  
I now think makes it illegal to sell this product as of April, 1994,  
once all existing stock is depleted.

Would anyone think U.S. Customs would confiscate such a device, if one was to try to bring one back that they purchased? Does customs go about confiscating radios? In my experience in traveling to Canada, I've never had a problem coming back to the U.S. I've been through Vancouver & Toronto airports, and each time U.S. Customs seems to just wave me by, sometimes not even wanting to see my ID or airplane ticket.

Any answers?

-----  
Date: Sun, 21 Aug 1994 16:49:30 MDT  
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!wupost!gumby!  
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!ve6mgs!usenet@network.ucsd.edu  
Subject: Daily Summary of Solar Geophysical Activity for 20 August  
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

20 AUGUST, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 20 AUGUST, 1994

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NOTE: Energetic electron fluence at greater than 2 MeV continues at moderate levels.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 232, 08/20/94  
10.7 FLUX=072.3 90-AVG=078 SSN=058 BKI=1232 1112 BAI=006  
BGND-XRAY=A3.0 FLU1=7.2E+05 FLU10=1.3E+04 PKI=1332 2222 PAI=007  
BOU-DEV=005,015,021,013,005,008,008,018 DEV-AVG=011 NT SWF=00:000  
XRAY-MAX= B1.1 @ 1348UT XRAY-MIN= A2.0 @ 2109UT XRAY-AVG= A3.7  
NEUTN-MAX= +003% @ 0845UT NEUTN-MIN= -001% @ 2310UT NEUTN-AVG= +0.3%  
PCA-MAX= +0.2DB @ 1705UT PCA-MIN= -0.3DB @ 1955UT PCA-AVG= +0.0DB  
BOUTF-MAX=55224NT @ 2358UT BOUTF-MIN=55191NT @ 1738UT BOUTF-AVG=55213NT  
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+081,+000,+000  
GOES6-MAX=P:+140NT@ 2038UT GOES6-MIN=N:-022NT@ 2256UT G6-AVG=+109,+030,-006  
FLUXFCST=STD:070,070,070;SESC:075,075,075 BAI/PAI-FCST=005,005,005/007,007,012  
KFCST=1213 3112 1213 3112 27DAY-AP=007,009 27DAY-KP=2221 2233 3222 3223  
WARNINGS=

ALERTS=  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 19 AUG 94 was 25.0.  
The Full Kp Indices for 19 AUG 94 are: 2- 2o 1+ 1+ 1+ 2- 2- 2-  
The 3-Hr Ap Indices for 19 AUG 94 are: 6 8 5 5 5 6 7 6  
Greater than 2 MeV Electron Fluence for 20 AUG is: 1.4E+08

#### SYNOPSIS OF ACTIVITY

-----  
Solar activity was at very low levels.

Solar activity forecast: solar activity is expected to be at very low levels. Region 7767 is the most probable region to produce a C class event.

The geomagnetic field has been at mostly quiet levels for the past 24 hours.

Geophysical activity forecast: the geomagnetic field is expected to be at mostly quiet levels.

Event probabilities 21 aug-23 aug

Class M	10/05/01
Class X	01/01/01
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 21 aug-23 aug

##### A. Middle Latitudes

Active	15/15/15
Minor Storm	10/10/10
Major-Severe Storm	01/01/01

##### B. High Latitudes

Active	20/20/20
Minor Storm	10/10/10
Major-Severe Storm	05/05/05

HF propagation conditions were normal over all regions. No changes are expected over the next 72 hours. The threat for flare-related short wave fadeouts is only slight as Region 7765 spends the next 24 hours rotating behind the west solar limb. Near-normal propagation will continue over the next 72 hours,

through 23 August inclusive.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 20/2400Z AUGUST

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7764	S06W55	358	0020	HRX	01	003	ALPHA	
7765	S13W90	033	0050	AXX	01	002	ALPHA	
7767	S13W08	311	0070	DAO	07	010	BETA	
7768	S13E01	302	0010	BX0	03	003	BETA	
7766	N09W35	338					PLAGE	

REGIONS DUE TO RETURN 21 AUGUST TO 23 AUGUST

NMBR LAT LO

NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 20 AUGUST, 1994

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
NONE									

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 20 AUGUST, 1994

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
NO EVENTS OBSERVED								

INFERRED CORONAL HOLES. LOCATIONS VALID AT 20/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS									
EAST	SOUTH	WEST	NORTH	CAR	TYPE	POL	AREA	OBSN	
NO DATA AVAILABLE FOR ANALYSIS									

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
19 Aug:	0026	0031	0036	B4.8	SF	7765	S09W70			
	0200	0258	0300	M1.6	SF	7765	S09W67			
	0446	0456	0502	B4.7						
	0928	0936	0944	B1.9						
	1555	1559	1601	B1.2						

2036	2040	2043	B1.1
2148	2152	2156	B7.6
2258	2301	2303	B4.8

# REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
	--	--	--	--	--	--	--	--	---	-----
Region 7765:	0	1	0	2	0	0	0	0	002	(25.0)
Uncorrelated:	0	0	0	0	0	0	0	0	006	(75.0)

Total Events: 008 optical and x-ray.

# EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
-----	----	----	----	----	----	-----	-----	-----
NO EVENTS OBSERVED.								

## NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

\*\* End of Daily Report \*\*

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Date: 22 Aug 1994 02:20:13 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!  
newsfeed.ksu.ksu.edu!moe.ksu.ksu.edu!wizard.uark.edu!comp!plaws@network.ucsd.edu  
Subject: FCC license renewal processing time data point  
To: info-hams@ucsd.edu

vaughnwt@olympus.net (Bill Vaughn) writes:

>MY last HAM class all recieved there license in four weeks. This was at the  
>time everyone here was screaming about a 17 week delay. I never saw it. The  
>FCC seems to be in gear now and working pretty smooth. Now is a good time to  
>send a letter to the FCC recognizing good work. Or we could just be a bunch of  
>whiners that only squawk when things aren't going just right. My letter is in  
>the e- mail.

You never saw it because your class lucked out.

Details were posted here several weeks ago, to paraphrase: Once the FCC's  
new license processing system went on line, they brought in temps. At  
first the temps were not informed of the FIFO policy. They just went at  
it! That situation was quickly rectified, but in the meantime, a whole  
bunch of folks got their tickets in <7 weeks.

There are still hundreds (thousands?) that have been waiting mu-u-uch  
longer. One of my friends passed Tech at the Tulsa hamfest on 21 May and  
has yet to receive his license. That's 91 days today.

ARRL VEC, are you listening?

Peter Laws<plaws@comp.uark.edu>|"Suppose you were a politician. Now suppose you  
n5uwy@ka5bml.#nwar.ar.usa.noam |were an idiot. Ah, but I repeat myself."-Twain

-----  
Date: Sun, 21 Aug 1994 23:39:59 GMT  
From: ihnp4.ucsd.edu!agate!msuinfo!harbinger.cc.monash.edu.au!news.cs.su.oz.au!  
metro!ipso!rwc@network.ucsd.edu  
Subject: IPS Daily Report - 21 August 94  
To: info-hams@ucsd.edu

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT  
ISSUED AT 21/2330Z AUGUST 1994 BY IPS RADIO AND SPACE SERVICES  
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.  
SUMMARY FOR 21 AUGUST AND FORECAST FOR 22 AUGUST - 24 AUGUST  
-----

1A. SOLAR SUMMARY

Activity: low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 71/6

GOES satellite data for 20 Aug

Daily Proton Fluence >1 MeV: 7.2E+05

Daily Proton Fluence >10 MeV: 1.3E+04

Daily Electron Fluence >2 MeV: 1.4E+08

X-ray background: A3.0

Fluence (flux accumulation over 24hrs)/ cm<sup>2</sup>-ster-day.

#### 1B. SOLAR FORECAST

	22 Aug	23 Aug	24 Aug
Activity	Very low	Very low	Very low
Fadeouts	None expected	None expected	None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number for 22 Aug: 70/5

#### 2A. MAGNETIC SUMMARY

Geomagnetic field at Learmonth: no data is available.

Estimated Indices : A	K	Observed A Index 20 Aug
Learmonth	-- ----	
Fredericksburg	7	8
Planetary	8	7

Observed Kp for 20 Aug: 1332 2222

#### 2B. MAGNETIC FORECAST

DATE	Ap	CONDITIONS
22 Aug	10	Quiet to unsettled
23 Aug	12	Unsettled
24 Aug	15	Unsettled to active

#### 3A. GLOBAL HF PROPAGATION SUMMARY

DATE	LATITUDE BAND		
	LOW	MIDDLE	HIGH
21 Aug	normal	normal	normal

PCA Event : None.

#### 3B. GLOBAL HF PROPAGATION FORECAST

DATE	LATITUDE BAND		
	LOW	MIDDLE	HIGH
22 Aug	normal	normal	normal-fair
23 Aug	normal	normal	normal-fair

24 Aug        normal            normal            normal-fair

-----  
4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY

Observed

DATE    T-index    MUFs at Canberra  
21 Aug    26       near predicted monthly values

Predicted Monthly T-index for August: 20

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST

DATE    T-index    MUFs  
22 Aug    20       Near predicted monthly values  
23 Aug    20       Near predicted monthly values  
24 Aug    20       Near predicted monthly values

--

IPS Regional Warning Centre, Sydney        |IPS Radio and Space Services  
RWC Duty Forecaster    tel: +61 2 4148329    |PO Box 5606  
Recorded Message        tel: +61 2 4148330    |West Chatswood NSW 2057  
email: rwc@ips.oz.au    fax: +61 2 4148331    |AUSTRALIA

-----  
Date: 22 Aug 1994 03:52:19 GMT  
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!cs.utexas.edu!  
gerald.cc.utexas.edu!astro.as.utexas.edu!oo7@network.ucsd.edu  
Subject: learning CW  
To: info-hams@ucsd.edu

We see a lot of requests here for computer programs by people interested in learning "the code". Some of us real oldies who were born before there were such things as computers learned our CW by listening on the air to real people sending real code, and perhaps some people still learn it that way these days.

I'm curious to know whether those who learn it from computer programs that send perfect code in a quiet room find it a shock once they get on the air and have to contend with real people sending code, fading signals, QRM, all that stuff? Is it easy to make the transition to the real world?

Perhaps it helps to learn the code without the distractions, but it must be a shock to some people - does this turn people off using it even after they have passed a code test?

I realize that computer programs can tell you the speed at which you are copying, and can be programmed to send other than the standard



ham QSO material that you hear on the air all the time and which is not always the most exciting text to copy, and I suppose a compromise is the W1AW code practise sessions (which I used so as to figure out my code copying speed).

Anyone have any real data on this? Do people who teach the code ever use real radios in class, and do teachers even have students send code?

Derek Wills (AA5BT, G3NMX)  
Department of Astronomy, University of Texas,  
Austin TX 78712. (512-471-1392)  
oo7@astro.as.utexas.edu

-----  
Date: Mon, 22 Aug 1994 02:11:29 GMT  
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!csus.edu!netcom.com!  
carreiro@network.ucsd.edu  
Subject: Mobile Radio Theft Insurance?  
To: info-hams@ucsd.edu

Macy Hallock (macy@telemax.com) wrote:

: Don't know if this is useful to you in your case. You might also want  
: to ask about such coverage as an adjunct to your homeowners insurance.  
: It's not the much different than fine art or jewelry coverage. The  
: issues are the cost per \$100, the deductible, and claims procedures.

On that note, I'd like to caution everyone who thinks that their homeowner's insurance policy "personal property" coverage will cover mobile gear. I had assumed that my Allstate coverage, which covered personal property outside the home (up to 10% of the personal property value, ie: \$50,000 personal property coverage yields \$5,000 coverage for property outside the home), would cover my mobile radio gear.

Unfortunately I had a chance to test out that policy early this year. 4 rigs, antennas and a scanner taken. I went through the entire process of making a claim, providing receipts, serial numbers and pictures. Throughout the process I was given the impression that there would be no problem. Then, right when I thought I would receive my settlement, they came up with a clause in the policy that said something to the effect that they do not cover any equipment that gets its power from the car battery and reproduces audio. They directed me to my auto insurance which to no surprise said if it was not previously declared on the policy, they would not cover it.

My point: I would have attained other insurance if I had known that my personal property coverage did not cover "gear that gets its power from the car's battery, and reproduces audio".

Don't fall into that gap!

Hopeing your mobiles are safe, secure and insured (as mine now are!)....  
73 for now. Paul N6HCS

--

carreiro@netcom.com  
N6HCS@N00ARY.#NOCAL.CA.USA.NA

-----  
Date: 22 Aug 1994 02:13:48 GMT  
From: ihnp4.ucsd.edu!library.ucla.edu!ucsbuxb.ucsb.edu!mcl!uznerk@network.ucsd.edu  
Subject: Mods for Standard C228A?  
To: info-hams@ucsd.edu

Subject says it all. I just picked up a Standard C228A 2m/220 HT  
and I'm wondering if there are any mods available. I've seen mods for  
the sister HT C528A but not for the 228.

Thanks in advance!  
Andy

--

Andrew Krenz KE6BIP | Warning: This signature file has been determined  
uznerk@mcl.ucsb.edu | to cause cancer in laboratory animals.

-----  
Date: Mon, 22 Aug 1994 02:33:08 GMT  
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!agate!library.ucla.edu!  
csulb.edu!csus.edu!netcom.com!sethr@network.ucsd.edu  
Subject: Radio Interface to Internet?  
To: info-hams@ucsd.edu

Ok this might be a really dumb question - but I am going to ask it anyway.

If one needed to download truly large files from the Internet (say in the  
range of 100 files of 50 megs each every day) - then the first thing that  
jumps to mind is - direct connect and bring in a T1 trunk from the \*phone  
company\* and lease it for about \$900 per month - right?

Is this actually the most economical way to do it? Couldn't an enterprising  
network provider who is already hooked up to the net just interface with a  
radio transmitter that could put data on the air waves and allow anyone with a  
receiver/modem to pick it up for the cost of the equipment and the cost  
to the network provider? Hey I told you it was a dumb question before

you started reading!

\*\*\*\*\*  
Click-On-Us (tm) Voice: 206.235.6119  
The Print Broker of the Internet Fax: 206.227.6608  
Email: sethr@netcom.com Addr: Renton, Washington  
Find "The World List of Desktop Publishers" on the Web  
URL=ftp://ftp.netcom.com/pub/conus/click.html  
\*\*\*\*\*

-----  
Date: Mon, 22 Aug 1994 05:12:02 GMT  
From: amd!amdahl!amdahl.uts.amdahl.com!netnews@decwrl.dec.com  
Subject: rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)  
To: info-hams@ucsd.edu

Posted-By: auto-faq 3.1.1.4  
Archive-name: radio/ham-radio/faq/part1

Rec.radio.amateur.misc Frequently Asked Questions  
Part 1 - Introduction to the FAQ and Amateur Radio  
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This is a regular posting of frequently-asked questions (FAQ) about Amateur Radio, also known as Ham Radio. It is intended to summarize some common questions on the rec.radio.amateur.misc newsgroup and Info-Hams mail list as well as to help beginners get started.

Please provide a copy of the FAQ to any new or soon-to-be Hams you know.

Regular FAQ postings can help save network bandwidth and maintain a good signal-to-noise ratio in the newsgroup. However, they can't do it alone - you, the reader, have to use them.

- \* If you are a new user, please print and review the FAQ articles and look at the instructions in the news.announce.newusers newsgroup before posting any articles. If you don't find the answer in the FAQ and you have tried elsewhere, then you have "done your homework" and it is acceptable to ask the question on the UseNet newsgroups. Along with your question, please state where else you have looked for the answer so others also know that you have done your homework.
- \* If you are an experienced user, please help by refraining from answering frequently-asked questions on the newsgroup if they are already answered by the FAQ articles. Instead, send e-mail to the user who asked the question. (It will be helpful if you include the part of the FAQ that answers their question, but not the whole thing.)

The FAQ cannot always prevent people from posting repetitive questions. But

even if hundreds of questions get posted, it saves you from having to answer them hundreds of times. Also, a friendly pointer to the FAQ in your first answer can help that person refer to the FAQ in the future. That is when we can begin to get a real savings of network bandwidth.

To reduce the size of each article, the FAQ information is posted in 3 parts:  
Part 1 - Introduction to the FAQ and Amateur Radio  
Part 2 - Amateur Radio Organizations, Services, and Information Sources  
Part 3 - Amateur Radio Advanced and Technical Questions

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### Part 3 - Amateur Radio Advanced and Technical Questions

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- \*\* What is the standard phonetic alphabet? (new 9/93)
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--Rec.radio.amateur.misc Frequently-asked Questions-----Part 1--

\*\* Introduction to the FAQ

\* How to Contribute to the FAQ Articles

We accept suggestions from the Amateur Radio community. Please consider that all new contributions need to be SHORT and concise in order to be included. If a contribution is too long, the FAQ editors can help you find a more appropriate FTP archive or mail server for your article.

We always accept corrections. Please allow some time (often not the next issue of the FAQ) because the FAQ maintainers do this as volunteers so each must give higher priority to their employers.

Send correspondence to [hamradio-faq@amdahl.com](mailto:hamradio-faq@amdahl.com) so that it will reach all the FAQ coordinators: (listed in alphabetical order)

Ed Hare	KA1CV	<a href="mailto:ehare@arrl.org">ehare@arrl.org</a>	(Newington, CT, USA)
Jack GF Hill	W4PPT	<a href="mailto:root@jackatak.raider.net">root@jackatak.raider.net</a>	(Brentwood, TN, USA)
Ian Klufft	KD6EUI	<a href="mailto:iklufft@oes.amdahl.com">iklufft@oes.amdahl.com</a>	(Santa Clara, CA, USA)
Paul Schleck	KD3FU	<a href="mailto:pschleck@gonix.com">pschleck@gonix.com</a>	(Omaha, NE, USA)
Chris Swartout	N6WCP	<a href="mailto:cas30@uts.amdahl.com">cas30@uts.amdahl.com</a>	(San Jose, CA, USA)
Steve Watt	KD6GGD	<a href="mailto:steve@wattres.sj.ca.us">steve@wattres.sj.ca.us</a>	(San Jose, CA, USA)
Rosalie White	WA1STO	<a href="mailto:rwhite@arrl.org">rwhite@arrl.org</a>	(Newington, CT, USA)
Derek Wills	AA5BT	<a href="mailto:oo7@astro.as.utexas.edu">oo7@astro.as.utexas.edu</a>	(Austin, TX, USA)

\* Do Not Ask Questions of the Editors

We wish it wasn't necessary to say this. Please don't send questions to the editors (unless you are sending an answer with it as a submission for the FAQ.) The proper procedure for questions on UseNet is 1) Read the FAQ, 2) if it isn't there, check other sources, and 3) post on the newsgroup.

The Internet has become an atmosphere where questions are asked of everyone as if they have an infinite amount of time to help. The volunteers who maintain the FAQ do not have time to answer questions. Some FAQ maintainers on the Net have been led to believe that no good deed goes unpunished - let's avoid bringing the same end to this effort.

\* Acknowledgements

All questions listed as modified "pre-4/92" are entirely Diana

Carlson KC1SP's work or her editing of a contributor's work. Diana established this FAQ and credit is due to her for founding this project.

Thanks to Devon Bowen KA2NRC for accepting this FAQ in e-mail every month to keep the FTP archive at ftp.cs.buffalo.edu up-to-date.

#### \* Notes on "Netiquette"

The rec.radio.amateur.misc newsgroup and Info-Hams mail list have a large daily volume of traffic. They can operate more efficiently if the following netiquette guidelines are followed. Please take them seriously.

- \* If you are new to UseNet, the introductory articles in news.announce.newusers are required reading. Go to that newsgroup now. Definitely, read the instructions there before posting anything. Other rec.radio.amateur.\* readers will appreciate it!
- \* Pick the right newsgroup. Use only the most specific newsgroup for your subject. For example, a question about a homebrew antenna only needs to be posted to rec.radio.amateur.antenna. Also, don't post to rec.radio.amateur.misc when the subject can go in another rec.radio.amateur.\* newsgroup. So, when there is a more specific newsgroup, that's the one you want.
- \* When posting a followup article, ALWAYS try to minimize the number of lines of quoted material from the original article.
- \* As a general rule when you try to determine whether to reply to someone by e-mail or with a followup article, remember to "praise in public, criticize in private." It's OK to disagree technically but be careful not to attack the person with whom you disagree. Also, be careful with your use of the word "you" when posting a follow-up article. Many unnecessary flame wars have started that way.
- \* Use a descriptive subject. For example, a message subject of "Ham Radio" tells the reader NOTHING about the contents of your article since the whole newsgroup is about Ham Radio. Other examples of subjects which are so broad that they become useless could include, "Help," "A Question," "Antennas," or "Frequencies." Maybe "Books on Antennas?" or "Where can I find Repeater Frequencies?" would be better, for example. Remember, in a busy newsgroup a lot of users decide which articles to read from the subject line alone. If you post, don't deprive yourself of an audience!
- \* Before answering a question, check if the FAQ adequately answers it or if someone else already answered it. If you have more to add, make sure to reference either the FAQ or the related articles.
- \* If a user posts a question which is directly answered by the FAQ, there is no need to post an answer - the information is already available on the newsgroup. Instead, just send an e-mail message which politely explains where to find the FAQ. They will probably appreciate it if you include the answer to their question. (Don't

send a "nastygram" - that would just discourage future participation.)

- \* Pay attention to the size of your audience - use the "Distribution:" header. If you leave it blank, your message will go to every civilized country in the world and occupy disk space in all news systems in all those places. If that's what you intend, that's fine but make sure your article is relevant outside your country. (In particular, Hams should already know there is more to the world than just their own country.)
- \* If you have an item for sale, please limit the distribution area so that, for example, an article about a radio for sale in New Jersey won't get to California or Europe. If you wish, you may cross-post your for-sale article to rec.radio.swap.
- \* Software sources should be posted to either alt.sources, comp.sources.misc, or comp.sources.\* for a specific machine type. Software binaries should be posted to the appropriate subgroup of comp.binaries.

\*\* What is Amateur Radio?

Amateur Radio is a non-commercial radio communication service whose primary aims are public service, technical training and experimentation, and communication between private persons. Amateur Radio operators are commonly called hams. Hams often communicate with each other recreationally but also provide communications for others at public events or in times of emergency or disaster.

\*\* Who can become a ham?

The answer to this question differs in every country.

The answer for the USA is listed below. If your country has a newsgroup specifically for it (i.e. UK, Australia, Germany) the most accurate answers can be found there. See Part 2 for the list of region-specific newsgroups.

If that doesn't help, the American Radio Relay League (ARRL) may be able to help because they communicate with similar organizations in other countries, probably including yours. They can be reached by electronic mail or surface mail (see Part 2.)

In the USA, anyone who is not a representative of a foreign government can be an Amateur Radio operator. There are tests that you must pass to get a license, however the tests are not insurmountable. On that general level, the requirements are probably similar in almost every country.

For more information on becoming a Ham in the USA, the ARRL has a toll-free number where you can request information:



1-800-32-NEW-HAM (don't worry about the number being one digit too long - the phone system ignores it.) Other information can also be obtained from the ARRL e-mail information server in the file called PROSPECT. Details on the server are in Part 2.

**\*\* Where can I locate information and books on Amateur Radio?**

Your local Radio Shack sells some ham radios and Amateur Radio license books. Books can also be obtained through the mail from ham radio organizations, such as ARRL in Newington, CT (203-666-1541) and W5YI in Dallas, TX (1-800-669-9594). There may be one or two ham radio stores in the local area (ie, within 50 miles). Try looking in the Yellow Pages under Radio Communications.

For the Novice license, get a Novice License manual, plus 5-word-per-minute Morse code tapes, costing around \$25. For the Technician license, get a combined Novice and Technician License manual, and an FCC Rules manual, costing around \$32. The FCC Rules manual is a good idea for Novice also, but not necessary, since the Novice License manual contains all the FCC Rules that are required for the Novice License.

The ARRL Education Activities Department has several programs to help amateurs (or prospective amateurs) to get started. Ask for a "New prospect package" available free of charge, from ARRL HQ, Educational Activities Department, 225 Main St, Newington, CT 06111.

Information on Ham Radio can also be obtained with your computer. Part 2 of this FAQ contains a significant amount of material on that subject.

**\*\* How much does it cost?**

To take the tests for any class of amateur radio license, there is a small charge (around \$5-\$6 currently) to cover copying costs and running the testing sessions. (Due to changes in 1993, Novice tests are under same procedures as the others.) The cost of a radio is really dependent on what you want to do. You can make your own radio and antenna for under \$150. You can buy a used single-band radio for \$150-\$300. Or you can buy a new multi-band multi-mode radio with all the doodads for \$300-\$3000. I'd suggest you learn more about ham radio, talk to local hams, find out what you want to do with ham radio first.

**\*\* Where can I take the tests?**

The Novice tests Used to be given by any two qualified hams of General class license or above. Now all the license tests are given by three qualified Volunteer Examiners (VEs) who volunteer their time.

To locate an ARRL testing session in your area, you can contact

ARRL at 203-666-1541 x282.

See also the section "Where can I find VE sessions in my local area?" in Part 2 because more information is available via UseNet.

**\*\* What are the tests like?**

First off, come prepared to VE sessions. Bring: TWO forms of ID, one of which has a picture on it; a calculator (if necessary); a pen and two pencils; the applicable examination fee (around \$5-\$6 for 1993); the original AND a copy of your current Amateur Radio license (if you have one); the original AND a copy of any CSCEs for tests you've already passed (if you have any).

Each of the written tests (Novice, Technician, General, Advanced, and Extra) are generally a multiple choice test of approximately one-tenth of the question pool. For example, if the question pool is approximately 300 questions, then the test will be a 30-question test. You need to get 75% correct to pass. Note that they truncate to determine the correct number of questions. That means for a 30 question test, you need to get 22 right, which is actually only 73.3%.

Once you've paid the small fee for Technician-Extra tests, it costs no extra to take another test, so I'd suggest you keep taking the next more advanced test until you fail. If you pass the written but not the Morse code (or vice versa) for a specific class license, you have up to one year to take the other test before you would have to retake the written test again. Note that some VEs will not allow you to take the written test unless you've first taken the Morse code test.

The Morse code test is a receiving test only. The test run 5 to 7 minutes. After the test, you are given a 10-question multiple-choice or fill-in-the-blank test. Passing grade is 7 or more. If you fail the 10-question test, the examiner team will examine your copy sheet to see if you have 1 minute of solid copy with no errors. For 5 wpm, that's 25 characters, for 13 wpm, that's 65 characters, for 20 wpm, that's 100 characters. If they can find 1 minute solid copy, you've still passed.

Hints on Morse code tests: Generally, it will be a standard QSO (conversation), and it MUST contain at least one of each of the following:

26 letters A-Z, 10 numbers 0-9, comma (,), period (.), slant or slash (/), question mark (?), double dash prosign (BT), end of message prosign (AR), end of contact prosign (SK).

The letters count as one character, all others count as two characters. There are a couple other prosigns which are worth knowing, but will not be on the test, like "I'm done talking, next"

is K, "I'm done talking, back to you" is KN, "Please wait" is AS.

\*\* What can I do with a ham radio license?

There are so many things, it's a difficult question to answer, but here's some ideas:

- \* Talk to people in foreign countries.
- \* Talk to people (both local and far away) on your drive to work.
- \* Help in emergencies by providing communications.
- \* Provide communications in parades or walkathons.
- \* Help other people become hams.
- \* Hook your computer to your radio and communicate by computers.
- \* Collect QSL cards (cards from other hams) from all over the United States and foreign countries and receive awards.
- \* Participate in contests or Field Day events.
- \* Provide radio services to your local Civil Defense organization thru ARES (Amateur Radio Emergency Service) or RACES (Radio Amateur Civil Emergency Service).
- \* Aid members of the US military by joining MARS (Military Affiliate Radio System).
- \* Participate in transmitter hunt games and maybe build your own direction-finding equipment.
- \* Have someone to talk to on those sleepless nights at home.
- \* Receive weather pictures via satellites.
- \* Build radios, antennas, learn some electronics and radio theory.
- \* Talk to astronauts in space, or use the moon to bounce signals back to people on the Earth.
- \* Experiment with Amateur TV (ATV), Slow-Scan TV (SSTV), or send still-frame pictures by facsimile.
- \* Experiment with amateur satellite communications.

\*\* What can't I do with an Amateur Radio license?

The most important thing you can't do is transact business of any kind over ham radio. Interference to other hams or services, as well as obscene, profane or indecent language is not tolerated and is illegal. Music and broadcasting are not allowed on ham radio. Some personal conversations may not be appropriate to Amateur Radio. Do you really want the whole world to hear about Aunt Mabel's hemorrhoids?

\*\* I'm interested, who will help me?

There are hams who are willing to become "Elmers" (mentors, helpers) in your local area. Look around and ask local hams. Search out local radio clubs. As well, some people have volunteered to be an Elmer over the Usenet. A list of UseNet Elmers and their e-mail addresses is posted to the newsgroup monthly. If anyone wants to be an Elmer, send e-mail to

elmers-request@unomaha.edu

There is also a lot to be said for exploring on your own. Take a look around the FTP archives and e-mail servers listed in Part 2. There's so much out there on UseNet, you'll find plenty of things you're interested in.

\*\* Should I build my own equipment or antenna?

[see also [rec.radio.amateur.homebrew](#) and [rec.radio.amateur.antenna](#)]  
"Homebrewing" is a fun and educational part of ham radio. It is a thrill to build your own transmitter and put it on the air. However, building your own receiver can be quite complicated; if you don't have electronics experience, you may want to buy a receiver instead. Most homebrew transmitters are QRP (transmit very low power). That's fine for an experienced ham with a very good antenna, but a Novice ham will just get frustrated. Your first rig, therefore should NOT be a homebrew.

Antennas can be much simpler projects than the transceiver, though some types are also quite involved. Most hams build their own antennas for base station use and buy antennas for mobile (car) use. Most beginner ham books describe how to build different types of antennas. Order of difficulty, from easiest to more difficult, for some common antennas are: wire dipole, Zepp, Yagi, Quad, and Log-Periodic. Books from many sources, including ARRL and several Hams, discuss antennas in depth.

When building or even understanding antennas, it is good to know the relationship between the antenna element length and the frequency or wavelength it is designed for. An antenna performs best at multiples of 1/4 of that wavelength, though 5/8 wave also has beneficial qualities. The wavelength is related to the frequency with the following formula:

wavelength (in meters) = 300 / frequency (in megahertz)

You do not need a huge antenna or tower like ones you may see around your neighborhood. Large beam antennas and 40-foot towers are very expensive. As a beginner, a simple dipole antenna is perfectly adequate. As you gain experience (and money :-), you may want to invest in something bigger.

If you can afford new rigs and antennas, there are many mail order stores that advertise in ham radio magazines. If you want to buy a used rig, the best place is at a "hamfest" (ham flea market). You should take along an experienced ham, since some of the used equipment may be inoperative, overpriced or poor quality. You can also answer ads in ham magazines or posted at ham radio stores, although often, by the time you call, the equipment has already been sold.

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Date: 22 Aug 1994 03:16:19 GMT  
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!magnus.acs.ohio-state.edu!afabro@network.ucsd.edu  
Subject: Shuttle Freqs  
To: info-hams@ucsd.edu

Hello,

Was wondering if anyone knows the frequencies that the shuttle uses for communications to earth or for other uses. I have a friend who wants to try to listen even though he doesn't have much in the way of a radio and antenna to listen with. Sorry if this is in a FAQ somewhere.

Thanks

Tony N8RRB  
afabro@magnus.acs.ohio-state.edu

-----  
Date: 21 Aug 1994 20:04:32 -0400  
From: news1.digex.net!digex.net!not-for-mail@uunet.uu.net  
Subject: TEK 486 300Mhz Oscilloscope Sale/Swap  
To: info-hams@ucsd.edu

Selling Tek 485 O'scope. Dual channel. The 300 Mhz range does not work but all other ranges work up to 150Mhz. Tektronix tells me it's a switch contact. Asking \$350 or will swap for Pro-43 scanner or AOR1000 (Any handheld scanner w/UHF Air). I prefer interested parties to be in the Maryland area so those interested can come by to check out the scope in person if they wish. E-mail me if interested.

Andy N3LCW

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Date: Fri, 19 Aug 94 13:56:25 GMT  
From: news2.new-york.net!starcomm.overleaf.com!n2ayj!n2ayj@uunet.uu.net  
Subject: Whence QST?  
To: info-hams@ucsd.edu

A while ago, the question arose about QST (the signal). I related that it was a Made-in-Newington Q code because that was what I was told. Then I received the following. I pass it along in the interest of accuracy, and because I found it mondo interesting.

+--+--+--+--+--+--+--+--+--+--+--+--+--+--+

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Date: 22 Aug 1994 00:42:29 GMT  
From: ihnp4.ucsd.edu!munnar.oz.au!comp.vuw.ac.nz!connolly@network.ucsd.edu  
Subject: Which group for BBC?  
To: info-hams@ucsd.edu

Apologies in advance if this is the wrong group, but.....

I am trying to find the e-mail address for the BBC. This seems to be the most appropriate group, but it's not quite it.

If anyone knows, I'd be grateful. I'll even accept abuse for using the wrong group if you can tell me where I should have looked,

Ta,

Patrick

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Date: Mon, 22 Aug 1994 01:44:57 GMT  
From: ihnp4.ucsd.edu!swrinde!emory!wa4mei!ke4zv!gary@network.ucsd.edu  
To: info-hams@ucsd.edu

References <332quu\$11h@ornews.intel.com>,  
<1994Aug20.174007.11384@ke4zv.atl.ga.us>, <777510136snz@arkas.demon.co.uk>  
Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)  
Subject : Re: Does 73 Magazine have

In article <777510136snz@arkas.demon.co.uk> Michael@arkas.demon.co.uk writes:  
>Ham Radio magazine. Haven't picked up a copy for years. Is it still published?

Sadly, no. CQ bought it and closed it. All they wanted was to assume the subscriber list to temporarily boost their circulation figures and enhance ad revenue. I suspect few \_Ham Radio\_ subscribers renewed CQ after their subscriptions ran out.

CQ did throw us a sop though. They publish \_Communications Quarterly\_. As the name suggests, it comes out 4 times a year, and it's of moderately good technical quality. About the best US amateur publication still in print as a matter of fact. Of course the \$9.95 cover price is somewhat off putting.

If your interest in radio is even moderately technical, your best bet

is to subscribe to the RSGB magazine, or if you read Japanese, to the Japanese \_Ham Radio\_ magazine. Both are much superior to any of the remaining US publications.

That leads me to a question for our non-US readers. What is the best amateur radio magazine in the world? Capsule reviews of non-US magazines would be most welcome.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				gary@ke4zv.atl.ga.us

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Date: (null)

From: (null)

QST is a standardized Q signal from the International Conventions dating from around 1910 or maybe the 1912 conventions. It is used as:

QST "A general call to all stations"

QST IMI "Have you received the general call to all stations?"

It was widely used in the maritime services until the middle to late 1920's, but for some reason it is not listed in any manuals after about 1927. It is listed in Irwin's RADIO from 1922, and in the US Army Training Circular No. 522(?) of 1922, as an international Q signal

QST was borrowed by the ARRL as its logo for the magazine in 1915, starting with the first issue, since it was the ham equivalent of a "general call to all stations", in print.

I have been unable to find out why it is discontinued from the published lists after about 1927.

Bob NA4G

+--+--+--+--+--+--+--+--+--+--+

Bob notes that Morse [VAII!] has been in his family for over 100 years. I believe he is telling the truth :-)

Cool beans, Bob. TU ES 73

--

Stan Olochwoszcz, N2AYJ - n2ayj@n2ayj.overleaf.com

"If tin whistles are made of tin, what do they make foghorns out of?" -

Lonnie Donnegan and his Skiffle Group. And the song was...?

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End of Info-Hams Digest V94 #943

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